

Application No. 10/009,885
Filed: January 22, 2002
TC Art Unit: 3751
Confirmation No.: 5084

AMENDMENT TO THE CLAIMS

c1
1. (Currently amended) A nib constituted of a segment of a coherent, elongate element of high porosity material, with at least a first end shaped to form a writing tip, wherein the high porosity material is constituted of fibers juxtaposed and held together by a binder or of sintered microbeads, and wherein pores or capillaries of said material are blocked over a limited thickness at the longitudinal outer periphery of the elongate element in order to create an airtight barrier, with the exception of the first end forming the writing tip.

2. (Previously presented) The nib according to claim 1, wherein for an elongate element of circular cross-section, having a diameter lying in the range of 2 mm to 15 mm, the limited thickness lies in the range of 0.01 mm to 1 mm.

3. (Previously presented) The nib according to claim 1, including a sealing agent which blocks the pores or the capillaries of said material over said limited thickness.

Application No. 10/009,885
Filed: January 22, 2002
TC Art Unit: 3751
Confirmation No.: 5084

C' 4. (Previously presented) The nib according to claim 3, wherein the elongate element is a rod that is constituted of acrylic fibers that are held together by a melamine formaldehyde resin, and wherein the sealing agent is also a melamine formaldehyde resin.

5. (Previously presented) The nib according to claim 3, wherein the elongate element is a rod that is constituted of polyester fibers, and wherein the sealing agent is an acid-catalyzed melamine resin, a melamine urea-formaldehyde resin, a two-component epoxy resin, or a two-component polyurethane resin.

6. (Previously presented) The nib according to claim 1, wherein the elongate element is constituted of sintered microbeads, and wherein the pores are blocked by localized hot-melting of said microbeads over said limited thickness.

7. (Previously presented) A method of treating a coherent high porosity, elongate element designed to form the nib according to claim 3, the method comprising the steps of:

continuously impregnating said elongate element with a sealing bath having a sealing agent that is inert relative to the

Application No. 10/009,885
Filed: January 22, 2002
TC Art Unit: 3751
Confirmation No.: 5084

CA components of the ink, impregnation being performed under conditions of viscosity, of time, of surface tensions, and of concentration in particular, such that said bath diffuses into the elongate element over a limited thickness at its longitudinal periphery; and

setting the sealing agent.

8. (Previously presented) The method according to claim 7, wherein the elongate element is a rod that is constituted of fibers that are secured by a binder, and said binder is used as the sealing agent.

9. (Previously presented) The method according to claim 8, wherein the rod is based on acrylic fibers, and the binding and sealing agent is an acid-catalyzed melamine formaldehyde resin.

10. (Previously presented) The method according to claim 7, wherein the sealing agent is set by subjecting the elongate element to heat treatment.

0Application No. 10/009,885

Filed: January 22, 2002

TC Art Unit:3751

Confirmation No.:5084

C 11. (Previously presented) The nib obtained by cutting into segments and machining a high porosity elongate element treated according to the method of claim 7.

12. (Previously presented) A method of treating a segment of coherent high porosity, elongate element designed to form the nib according to claim 6, wherein said segment is obtained by molding and sintering microbeads, and said method comprising the step of:

applying a longitudinal, peripheral, thermal shock over the segment, with the exception of the first end which forms the writing tip, so as to obtain localized hot-melting of the microbeads over a limited thickness.

13. (Previously presented) The method according to claim 12, wherein the thermal shock is performed at a temperature lying in the range of 200°C to 300°C for a period of 1 to 10 seconds.

14. (New) A writing implement comprising an ink included in a solvent and a nib insuring the transfer of ink from an ink reservoir to the end of the nib serving as a writing tip, wherein the nib is constituted of a segment of a coherent elongate element of high porosity material, with at least a first end shaped to

0Application No. 10/009,885

Filed: January 22, 2002

TC Art Unit:3751

Confirmation No.:5084

C form the writing tip, and wherein the high porosity material is constituted of fibers juxtaposed and held together by a binder of sintered microbeads, and wherein pores or capillaries of said material are blocked over a limited thickness at the longitudinal other periphery of the elongate element, in order to create an airtight barrier preventing the ink solvent from evaporating or limiting evaporation thereof, with the exception of the first end forming the writing tip.
